

Complete Summary

TITLE

Pneumonia: percent of patients with a history of smoking cigarettes who are given smoking cessation advice or counseling during hospital stay.

SOURCE(S)

Specifications manual for national hospital quality measures, version 1.04.
Centers for Medicare and Medicaid Services (CMS), Joint Commission on Accreditation of Healthcare Organizations (JCAHO); 2005 Aug. various p.

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percent of pneumonia patients with a history of smoking cigarettes who are given smoking cessation advice or counseling during the hospital stay. For the purposes of this measure, a smoker is defined as someone who has smoked cigarettes anytime during the year prior to hospital arrival.

RATIONALE

Tobacco use is the single greatest cause of disease in the United States today. Smoking accounts for one out of every five deaths in the United States and is the most important modifiable cause of premature death. Smoking cessation treatments ranging from brief clinician advice to specialist-delivered intensive programs, including pharmacotherapy, are not only clinically effective, but are also extremely cost-effective relative to other commonly used disease prevention

interventions and medical treatments. Hospitalization can be an ideal opportunity for a patient to stop smoking, and smoking cessation may promote the patient's medical recovery. Patients who receive even brief smoking-cessation advice from their physicians are more likely to quit than those who receive no counseling whatsoever.

PRIMARY CLINICAL COMPONENT

Pneumonia; smoking cessation advice or counseling

DENOMINATOR DESCRIPTION

Pneumonia patients 18 years of age and older with a history of smoking cigarettes anytime during the year prior to hospital arrival (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

Pneumonia patients (cigarette smokers) who receive smoking cessation advice or counseling during the hospital stay

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Overall poor quality for the performance measured
Variation in quality for the performance measured

EVIDENCE SUPPORTING NEED FOR THE MEASURE

Hudmon KS, Hemberger KK, Corelli RL, Kroon LA, Prokhorov AV. The pharmacist's role in smoking cessation counseling: perceptions of users of nonprescription nicotine replacement therapy. J Am Pharm Assoc (Wash DC) 2003 Sep-Oct; 43(5):573-82. [PubMed](#)

Kikano GE, Jaen CR, Gotler RS, Stange KC. The value of brief, targeted smoking cessation advice. Fam Pract Manag 2000 Jan; 7(1):50-2.

Sheahan SL. How to help older adults quit smoking. Nurse Pract 2002 Dec; 27(12):27-33; quiz 34. [PubMed](#)

The Agency for Health Care Policy and Research smoking cessation clinical practice guideline. JAMA1996 Apr 24;275(16):1270-80. [68 references] [PubMed](#)

U.S. Department of Health and Human Services, Public Health Service. Fiore MC, Bailey WC, Cohen SJ, et al. Treating tobacco use and dependence. Clinical practice guideline. Rockville (MD): U.S. Department of Health and Human Services, Public Health Service; 2000 Jun. 197 p. [311 references]

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Accreditation

Collaborative inter-organizational quality improvement

Internal quality improvement

Pay-for-performance

Application of Measure in its Current Use

CARE SETTING

Hospitals

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Measure is not provider specific

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Age greater than or equal to 18 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

See "Burden of Illness" field.

BURDEN OF ILLNESS

In the United States (U.S.), pneumonia is the sixth most common cause of death. From 1979-1994, the overall rates of death due to pneumonia and influenza increased by 59%. Much of this increase is due to a greater population of persons aged 65 years or older, and a changing epidemiology of pneumonia, including a greater proportion of the population with underlying medical conditions at increased risk of respiratory infection.

According to the National Cancer Institute and the U.S. Department of Health and Human Services, more than 430,000 deaths each year are attributed to a smoking related illness; included in these deaths are roughly 4,000 infants. Smoking accounts for one out of every five deaths in the United States and is the most important modifiable cause of premature death.

EVIDENCE FOR BURDEN OF ILLNESS

Bartlett JG, Dowell SF, Mandell LA, File Jr TM, Musher DM, Fine MJ. Practice guidelines for the management of community-acquired pneumonia in adults. Infectious Diseases Society of America. Clin Infect Dis 2000 Aug; 31(2):347-82. [218 references] [PubMed](#)

Clinical interventions to prevent tobacco use by children and adolescents. A supplement to 'How to help your patients stop smoking: a National Cancer Institute manual for physicians'. Bethesda (MD): U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health; Various p.

National Cancer Institute. Prevention and cessation of cigarette smoking: control of tobacco use. [internet]. Bethesda (MD): National Cancer Institute; 2002 Sep[cited 2002 Dec 06]. [10 p].

Specifications manual for national hospital quality measures, version 1.04. Centers for Medicare and Medicaid Services (CMS), Joint Commission on Accreditation of Healthcare Organizations (JCAHO); 2005 Aug. various p.

UTILIZATION

Annually, 2-3 million cases of community acquired pneumonia result in 10 million physician visits; 500,000 hospitalizations; and 45,000 deaths.

EVIDENCE FOR UTILIZATION

Bartlett JG, Dowell SF, Mandell LA, File Jr TM, Musher DM, Fine MJ. Practice guidelines for the management of community-acquired pneumonia in adults. Infectious Diseases Society of America. Clin Infect Dis 2000 Aug; 31(2): 347-82. [218 references] [PubMed](#)

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Discharges, 18 years of age and older, with a principal diagnosis of pneumonia or a principal diagnosis of septicemia or respiratory failure (acute or chronic) and an other diagnosis code of pneumonia with a history of smoking cigarettes anytime during the year prior to hospital arrival

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Discharges with an International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Principal Diagnosis Code of pneumonia or ICD-9-CM Principal Diagnosis Code of septicemia or respiratory failure (acute or chronic) and an ICD-9-CM Other Diagnosis Code of pneumonia as defined in Appendix A of the original measure documentation with a history of smoking cigarettes anytime during the year prior to hospital arrival

Exclusions

- Patients who had no working diagnosis of pneumonia at the time of admission
- Patients receiving Comfort Measures Only
- Patients who expired in the hospital
- Patients who left against medical advice (AMA)
- Patients discharged to hospice
- Patients who transferred to a federal hospital
- Patients transferred to another short term general hospital for inpatient care
- Patients less than 18 years of age

DENOMINATOR (INDEX) EVENT

Clinical Condition
Institutionalization

DENOMINATOR TIME WINDOW

Time window is a single point in time

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

Pneumonia patients (cigarette smokers) who receive smoking cessation advice or counseling during the hospital stay

Exclusions

None

NUMERATOR TIME WINDOW

Institutionalization

DATA SOURCE

Administrative and medical records data

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

External comparison at a point in time

External comparison of time trends

Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

The core measure pilot project was a collaboration among the Joint Commission, five state hospitals associations, five measurement systems, and 83 hospitals from across nine states. Participating hospitals collected and reported data for community acquired pneumonia (CAP) measures from March 2001 to December 2001.

Core measure reliability visits were completed the summer of 2001 at a random sample of 16 participating hospitals across 6 states.

Preliminary data from the pilot test show a mean measure rate of 35% for the adult smoking measure, indicating significant room for improvement.

EVIDENCE FOR RELIABILITY/VALIDITY TESTING

Joint Commission on Accreditation of Healthcare Organizations (JCAHO). A comprehensive review of development and testing for national implementation of hospital core measures. Oakbrook Terrace (IL): Joint Commission on Accreditation of Healthcare Organizations (JCAHO); 40 p.

Identifying Information

ORIGINAL TITLE

PN-4: adult smoking cessation advice/counseling.

MEASURE COLLECTION

[National Hospital Quality Measures](#)

MEASURE SET NAME

[Pneumonia](#)

SUBMITTER

Centers for Medicare & Medicaid Services
Joint Commission on Accreditation of Healthcare Organizations

DEVELOPER

Centers for Medicare and Medicaid Services/Joint Commission on Accreditation of
Healthcare Organizations

ENDORSER

National Quality Forum

INCLUDED IN

Hospital Compare
Hospital Quality Alliance

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2000 Aug

REVISION DATE

2005 Aug

MEASURE STATUS

Please note: This measure has been updated. The National Quality Measures
Clearinghouse is working to update this summary.

SOURCE(S)

Specifications manual for national hospital quality measures, version 1.04.
Centers for Medicare and Medicaid Services (CMS), Joint Commission on
Accreditation of Healthcare Organizations (JCAHO); 2005 Aug. various p.

MEASURE AVAILABILITY

The individual measure, "PN-4: Adult Smoking Cessation Advice/Counseling," is
published in "Specifications Manual for National Hospital Quality Measures." This

document is available from the [Joint Commission on Accreditation of Healthcare Organizations \(JCAHO\) Web site](#). Information is also available from the [Centers for Medicare & Medicaid Services \(CMS\) Web site](#). Check the JCAHO Web site and CMS Web site regularly for the most recent version of the specifications manual and for the applicable dates of discharge.

COMPANION DOCUMENTS

The following are available:

- A software application designed for the collection and analysis of quality improvement data, the CMS Abstraction and Reporting Tool (CART), is available from the [CMS CART Web site](#). Supporting documentation is also available. For more information, e-mail CMS PROINQUIRIES at proinquiries@cms.hhs.gov.
- Joint Commission on Accreditation of Healthcare Organizations (JCAHO). A comprehensive review of development and testing for national implementation of hospital core measures. Oakbrook Terrace (IL): Joint Commission on Accreditation of Healthcare Organizations (JCAHO); 40 p. This document is available from the [JCAHO Web site](#).
- Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Attributes of core performance measures and associated evaluation criteria. Oakbrook Terrace (IL): Joint Commission on Accreditation of Healthcare Organizations (JCAHO); 5 p. This document is available from the [JCAHO Web site](#).
- Hospital compare: a quality tool for adults, including people with Medicare. [internet]. Washington (DC): U.S. Department of Health and Human Services; 2005 [updated 2005 Sep 1]; [cited 2005 Apr 15]. This is available from the [Medicare Web site](#).

NQMC STATUS

This NQMC summary was completed by ECRI on February 7, 2003. The information was verified by the Centers for Medicare/Medicaid Services and the Joint Commission on Accreditation of Healthcare Organizations on February 12, 2003. This NQMC summary was updated by ECRI on October 24, 2005. The information was verified by the measure developer on December 7, 2005.

COPYRIGHT STATEMENT

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